

# ANSIBLE: A Network of Social Interactions for Bilateral Life Enhancement, Phase II

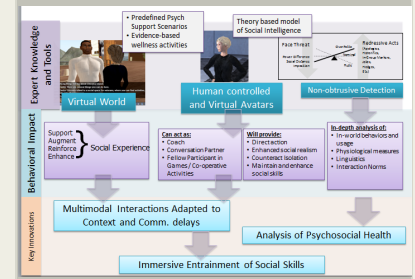
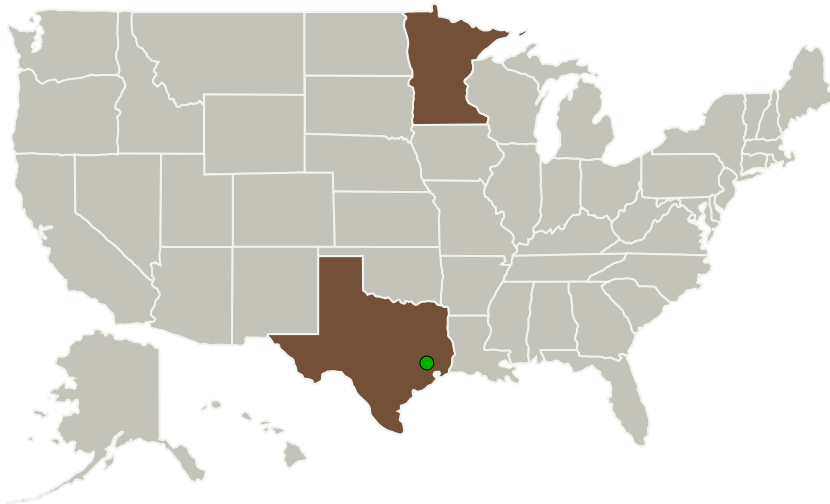
Completed Technology Project (2014 - 2017)



## Project Introduction

Studies in ground-based analogs of Isolated and Confined Environments (ICE) have identified sensory monotony and social isolation as threats to crew psychological well-being. Further, the lack of real-time communications in future missions will impact crew interactions with their support systems, i.e. family, friends, and colleagues, are critical. ANSIBLE (A Network of Social Interactions for Bilateral Life Enhancement) leverages evidence based strategies to 1) augment asynchronous communications using Virtual Environments (VEs) and facilitate novel interaction methods beyond email, 2) use the inherently immersive and stimuli rich nature of VEs to counteract sensory monotony, and 3) leverages VEs and intelligent Virtual Agents (VAs) as companions and advisors to combat social monotony and detect changes in astronaut psychosocial states can increase astronaut self-awareness, suggest countermeasures, and provide rehearsal scenarios to maintain and enhance interpersonal skills. Along with Dr. Morie, SIFT will leverage its prior work with human communication models and unobtrusive detection of psychosocial dimensions, to enhance VE and VA technologies. The resulting tool will advance the future social landscape that connects the flight crew with Earth, and can be used pre, during, and post flight to connect crew and ground, providing a sense of social consistency and permanence.

## Primary U.S. Work Locations and Key Partners



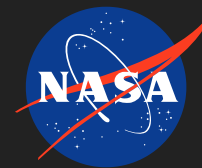
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Organizations Performing Work	Role	Type	Location
SIFT, LLC	Lead Organization	Industry	Minneapolis, Minnesota
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

Primary U.S. Work Locations	
Minnesota	Texas

## Project Transitions

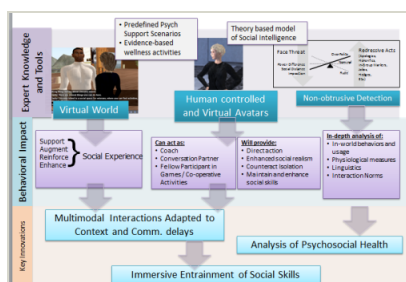
▶ **April 2014:** Project Start

✓ **September 2017:** Closed out

### Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/137634>)

## Images



### Briefing Chart Image

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(<https://techport.nasa.gov/image/133658>)

## Organizational Responsibility

### Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

### Lead Organization:

SIFT, LLC

### Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

## Project Management

### Program Director:

Jason L Kessler

### Program Manager:

Carlos Torrez

### Principal Investigator:

Jeremy F Gottlieb

### Co-Investigator:

Peggy Wu

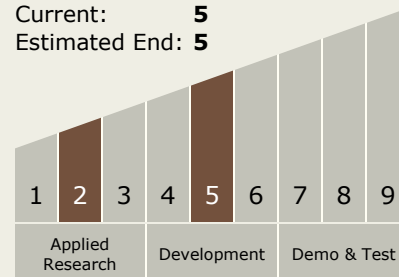
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## Technology Maturity (TRL)

Start: 2  
Current: 5  
Estimated End: 5



## Technology Areas

### Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  - └ TX06.3 Human Health and Performance
    - └ TX06.3.3 Behavioral Health and Performance

## Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System